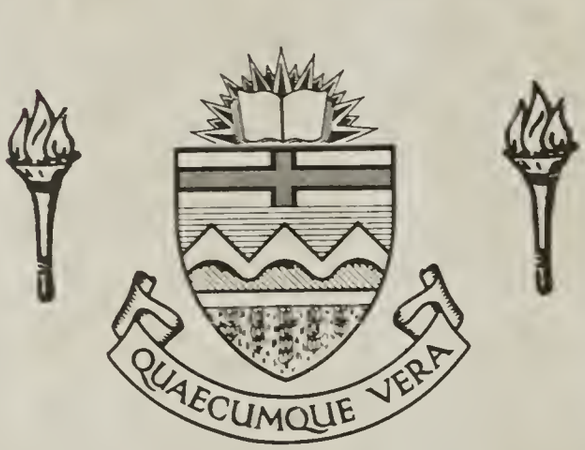

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will be held in the

BESSBOROUGH HOTEL

SASKATOON, SASK.

September 18th, 19th, 20th

1951

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Education for Rural Boys

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In September, 1948, The Canadian Research Committee on Practical Education prepared a preliminary report called "Secondary School Education in Agricultural Communities." This report showed that:—

1. One-half of the children of school age live in rural communities.
2. About one-third of the gainfully employed males in Canada are engaged in agriculture.
3. The formal education of persons engaged in agriculture is below the average for all occupations, and below that of every occupation except logging, fishing, hunting, and trapping.
4. Farmers in all provinces are keenly aware of the educational needs of their children, strongly in accord with attempts to improve rural education, and highly insistent that further improvements be made.
5. Farmers place inadequacy of the high school program above all other reasons for rural boys dropping out of school.
6. Though subjects such as agriculture, farm mechanics, and home economics are not widely available in rural communities, they are strongly endorsed by farmers. Throughout the nation farmers are in favour of composite schools. To quote from the questionnaire, "These schools have facilities to give a general course, with academic subjects combined with such subjects as commercial work, home economics, shop work, and practical agriculture; or such schools can provide specialized training in some one field of instruction." In brief, farmers are much in favour of schools which provide some subjects other than those usually termed "academic."

In March, 1950, the Committee published *Your Child Leaves School*, a survey of some 26,000 students who left school by dropping out or by graduation during the year 1948. It was noted that boys entering primary industries are largely drop-outs, and often early drop-outs from Grades VII, VIII, or IX. Among children of farm

owners and managers, of 100 boys and 100 girls enrolled in Grade VII, 63 boys and 38 girls leave school before graduation. Presumably the rate of dropping out would average even higher among children of farm labourers.

The report, *Your Child Leaves School*, along with *Youth Figured Out*, by J. E. Robbins,[1] shows that farm boys drop out of school in large numbers. Many of them at first enter primary industries in rural areas but later drift to towns and cities where their limited education confines them largely to unskilled occupations. Thus we have among farm boys large numbers who are not making the most of their abilities. They are unprepared for agriculture or for other skilled occupations. Some rural to urban migration appears inevitable, and is not undesirable. Moreover, factors largely beyond the control of the school affect such movements of population. Education for farm boys should meet the needs of those who enter other occupations as well as agriculture.

The present study is directed especially towards the preparation of farm boys for occupational competence in agriculture.

I. THE QUESTIONNAIRE

The questionnaires were distributed through major farm organizations in the various provinces. As will be noted in Table 1, the sample is representative of leaders in agricultural communities. The level of formal education is considerably above census returns for all males employed in agriculture. Eighty-eight per cent are owners or part-owners of farms and only two per cent are farm labourers. The type of respondees is most apparent in the data on positions in community activities. Only six per cent reported non-participation. The remaining per cents total 185. In other words, the 94 per cent who participated in community activities averaged about two activities per person.

In Ontario, responses obtained through farm organizations were insufficient. Questionnaires were then distributed to parents of boys enrolled in agriculture courses in secondary schools. Consequently, the Ontario returns are in large measure drawn from communities where agriculture is taught. As will be noted, this leads to some differences in results.

Of the 1,318 responses, 32 were made by groups or clubs, and could not be classified under sex, age, etc. in Table 1. Answers

[1]Robbins, John E. *Youth Figured Out.* Ottawa: The Canadian Youth Commission, p. 12.

to all questions were remarkably complete, another indication of enthusiasm and interest. For this reason, "no response" is not specified. Per cents are computed on known responses.

Table 1—Per Cent Distribution of Respondees to Questionnaire

Respondees to Questionnaire	Maritimes and Quebec[1] (N = 217)	Ontario (N = 470)	Manitoba and Saskatchewan (N = 436)	Alberta and British Columbia (N = 195)	Total (N = 1318)
Sex					
Male	70	90	91	73	85
Female	30	10	9	27	15
Age					
Under 30	15	6	14	14	11
30–50	55	59	55	59	57
over 50	30	35	31	27	32
Last School Grade Attended					
Up to VI	1	4	2	3	3
VII	7	4	4	1	4
VIII	15	38	22	26	27
IX	14	13	11	11	12
X	21	10	14	14	14
XI	30	7	24	14	18
XII	11	11	23	23	16
XIII	1	13	..	8	6
Education Beyond High School[2]					
University	7	5	4	3	5
Agricultural College	3	7	6	4	6
Agricultural School	5	4	11	5	7
Normal School	20	6	10	14	11
Business College	8	6	3	7	5
Short Course (Agriculture)	5	9	11	5	9
Night School	1	1	1	1	1
Correspondence	2	..	1	1	1
Others	4	3	3	9	4
None	46	61	51	51	53
Occupation[3]					
Farm owner	79	83	76	82	81
Farm partner	7	5	10	8	7
Farm tenant	..	3	7	5	4
Farm manager	4	..	..	1	1
Farm employee	4	3	2	2	2
Other occupations	6	6	5	2	5

Table 1—Continued

Respondees to Questionnaire	Maritimes and Quebec[1] (N = 217)	Ontario (N = 470)	Manitoba and Saskatchewan (N = 436)	Alberta and British Columbia (N = 195)	Total (N = 1318)
Size of Farm[3]					
Under 50 acres	6	8	..	8	5
50–100 acres	34	35	1	12	20
101–320 acres	50	52	30	40	42
321–640 acres	8	5	34	21	18
over 640 acres	2	..	35	19	15
Type of Farming[3]					
General (mixed)	83	80	80	74	80
Special types—					
Dairy	13	6	..	7	5
Beef	1	2	..	3	1
Grain	..	1	19	8	8
Fruit	2	6	..	3	3
Market Garden	..	2	..	1	1
Others	..	3	1	4	2
Positions in Community Activities[2]					
Municipal Council	13	17	9	4	11
School Board	39	35	40	25	36
Farm organization	72	62	29	88	55
Co-operative	14	8	33	11	19
Wheat Pool	..	..	63	4	25
Credit Union	6	1	10	3	5
Church	13	8	12	6	10
Others	22	20	67	9	24
None	4	12	3	2	6

[1]English-speaking only.

[2]Per cents exceed 100 because some listed more than one.

[3]Farmers' wives responded according to their husband's category.

Questionnaire responses are considered below under two heads, "Principles of Agricultural Education" (Questions 1–6), and "Details of Agricultural Education" (Questions 7–14). Results by zones are noted in Tables 2 and 3. Further analyses by sex, age, etc. are reported for separate questions where significant differences have been noted. Unanimity frequently precluded consideration of these factors. Comments relating to particular questions are included with the reports for each question. Comments beyond the scope of the questions are reported in a section called, "Further Comments."

II. PRINCIPLES OF AGRICULTURAL EDUCATION

The replies to questions dealing with certain principles of agricultural education are shown in Table 2.

Table 2—Principles of Agricultural Education

(Per Cent Distribution)

Question	Maritimes & Quebec	Ontario	Man. and Sask.	Alberta and B.C.	Total
Relative importance of					
Facilities—1st choice	5	8	5	4	6
2nd "	26	27	29	29	28
3rd "	69	65	66	67	66
Program—1st choice	33	33	26	28	30
2nd "	47	44	48	49	47
3rd "	20	23	26	23	23
Teacher— 1st choice	62	59	69	66	64
2nd "	28	30	24	23	27
3rd "	10	11	7	11	9
Influence of program					
Encourages to stay on farm	6	20	5	4	10
Educates away from farm	36	22	31	32	29
Has little influence	58	58	64	64	61
a. Is agriculture included?					
Yes	28	83	54	30	57
No	72	17	46	70	43
b. Is it vocational agriculture?					
Yes	39	71	19	31	48
No	61	29	81	69	52
c. Is farm mechanics taught?					
Yes	19	48	8	13	29
No	81	52	92	87	71
d. How much practical value?					
Great value	17	25	6	21	18
Moderate	46	60	52	25	54
Little or no	37	15	42	54	28
Is special training needed?					
Yes	90	84	92	94	89
No	10	16	8	6	11
Begin in high school or junior high school?					
Yes	96	92	95	94	94
No	4	8	5	6	6
At what grade?					
Grade VII	47	32	31	45	36
VIII	29	25	33	21	28
IX	17	33	24	22	26
X	7	8	11	10	9
XI	..	2	1	2	1

Definitions Used

1. *Vocational Agriculture*—Training, under a qualified instructor in vocational agriculture, in practical problems relating to farming, such as, how to produce farm commodities efficiently, how to market farm products to advantage, how to conserve soil and other natural resources, how to manage a farm business.

2. *Qualified Instructor in Vocational Agriculture*—One who has graduated from an Agricultural College, has had practical farm experience, and has had professional training as a vocational agriculture teacher.

3. *Farm Mechanics*—General mechanical training related to farm operations, such as care and maintenance of all farm machinery, carpentry, black-smithing, etc.

4. *Successful Farmer*—A farmer who makes a satisfactory living for himself and family, follows sound farming practices so that his farm will be maintained at a reasonable level of productivity, and assumes his fair share in promoting and supporting worthwhile community activities.

Question	***Replies*** (*Average Rank*)
1. *In considering the function and effectiveness of the rural high school, what in your opinion, is the relative importance of the following: (Indicate the order in which you would place these items by the use of numbers 1, 2, 3).*	
(*a*) *The facilities with which the school is equipped*	*2.6*
(*b*) *The program of studies offered in the school....*	*1.9*
(*c*) *The qualifications and personality of the teacher..*	*1.5*

There is general agreement that the qualifications and personality of the teacher are of first importance, with an average rank of 1.5. The program of studies is placed second with an average rank of 1.9. The facilities of the school are placed third with an average rank of 2.6. There is little difference in this ranking among the four zones. It remains about the same for all age groups, except that the under age 30 group places the teacher and the program about equal in importance. Those with more education place a somewhat higher value upon the influence of the teacher, as do also those who are members of school boards.

It is clear from the replies to this question, and from many comments made, that the curriculum is considered to be very important; but that even more important are the qualifications, personality, and attitude of the teacher.

Question	***Replies*** (*Per Cent*)
2. *What influence does the program of studies now followed in the rural high school in your area have in keeping rural boys on the farm, or in encouraging them to leave the farm? Check the statement with which you agree.*	
(*a*) *The program of studies encourages them to stay on the farm*	10
(*b*) *The program of studies educates them away from the farm*	29
(*c*) *The program of studies has little influence on their decision*	61

The majority think the program has little influence on the decision of rural boys to stay on the farm or to leave it. Roughly, 30 per cent think the program in their high school educates the boys away from the farm. Only 10 per cent think the program in their high school encourages the boys to stay on the farm.

In Ontario more believe that the program encourages boys to stay and fewer that it educates them away. In the under age 30 group, only 5 per cent think the program encourages boys to stay, and 69 per cent think it has little influence. Among those with more education a higher percentage think the program has little influence or that it educates away from the farm.

Where agriculture is taught in the local high school, 17 per cent think the program encourages boys to stay. Where vocational agriculture is taught, 29 per cent think it encourages them to stay. Where farm mechanics is taught, 31 per cent think it encourages them to stay.

Many respondees apparently believe that inclusion of agriculture in the curriculum creates, among rural boys, a more favourable reaction to the possibilities of farming as a career.

In the comments on a number of questionnaires reference is made to the lack of sympathy for agriculture and rural life shown by some teachers. Typical is the comment of a Manitoba lady, a farm owner:

A great influence, as I see it, is the attitude of a teacher in educating a boy off the farm—by such remarks as "wasted talent," "a brilliant mind," which they imagine should be placed in towns or cities. A successful farmer, like a business man, requires intelligence. The importance of the farm should be taught in all grades. All children have pointed out to them, as examples of highly respected citizens, doctors, lawyers, successful business men, but never a successful farmer. The farmer is too often belittled.

An official of an Ontario Co-operative states this point of view with clarity and force:

The writer fully intended to farm while attending high school but was very dissatisfied with the lack of curricula and viewpoint with a rural direction. The absence of farm subject matter was bad enough, but the lack of respect for farming was worse. It was assumed that anyone capable of completing high school would not farm.

In a school of five or six teachers, the principal often illustrated physics or mathematics by reference to his Air Force experience but never to his farm experience—although he had been a farm boy. Why couldn't our science have dealt more with the farm scene?

I have been delighted with the work being done now in schools such as Port Perry and Simcoe. You can find the influence running through the homes and the community as well as the local farms.

But technical training for farming and homemaking is only half the job. We need a continual quickening of civic thought emanating from the schools. We need an interpretation of history which stimulates. We need an introduction to the art and poetry of rural life. We need an understanding of the rural community and its institutions. We need all this, not only in the schools, but carrying on through all life: through farm forums, folk schools, the rural church, farm and co-operative organizations.

Question	***Replies*** (*Per Cent*)	
3. *With respect to the high school now serving your area. (Answer Yes or No to each part.)*	*Yes*	*No*
(*a*) *Is agriculture included in the curriculum?*	57	43
(*b*) *If so, is it vocational agriculture? (Definition 1)*	48	52
(*c*) *Is farm mechanics (Definition 3) taught?*	29	71
(*d*) *How much practical value does the work in agriculture now offered in your local high school have for boys expecting to engage in farming or in related occupations? Check the statement below which comes closest to expressing your opinion.*		
(*1*) *It is of great value*	18	
(*2*) *It is of moderate value*	54	
(*3*) *It is of little or no value*	28	

Fifty-seven per cent report that agriculture is included in the curriculum in their local high school. The highest per cent is in Ontario. This result may be influenced by the method of sampling used in that province.[1] It is probable that because of this the overall per cent of 57 is somewhat high.

Where agriculture is taught, 48 per cent say that it is vocational agriculture.[2] Presumably in the remaining 52 per cent, the agriculture taught is in the form of agricultural science. More report vocational agriculture and farm mechanics in Ontario than in other zones. This reflects the rapid extension of composite high schools in rural areas in Ontario in recent years.

In considering the replies to 3 (*d*), it should be remembered that in many cases the program in agriculture is a recent development. Many comment on this and say that it is too soon to assess the value of the program. Fifty-four per cent think the program of agriculture to be of moderate value. Eighteen per cent think it of great value and 28 per cent of little or no value. Fewer in Manitoba and Saskatchewan think the program to be of great value. More in Alberta and British Columbia think it to be of little or no value.

The per cent distribution of replies grouped as to the type of agricultural program in the local high school is:

	Great Value	Moderate Value	Little Value
Non-vocational agriculture	5	49	46
Vocational agriculture	34	61	5
Farm mechanics	38	59	3

It seems clear that programs which consist of vocational agriculture and/or farm mechanics are strongly endorsed.

In many of the comments there is mention of the need for farm mechanics. To quote a Saskatchewan farmer, age 66:

> In this machine age, a training in farm mechanics is very important. In this neighbourhood far too many youngsters know only what mechanics they have picked up at random. Few have had any training. There are only two first class blacksmiths in this area, both close to 70 years of age, and the poor old fellows are worked to death.

[1]See page 4.

[2]See Definition 1, page 8.

A Nova Scotia farmer says:

> Most important of these subjects on a farm would be blacksmithing, carpentry, and motor mechanics.

Many mention the need of teaching conservation of soil, weed control, use and care of farm equipment. Many mention the need of more teachers with training in agriculture. A number suggest that travelling instructors might be used to advantage in more remote areas.

Question	***Replies*** (*Per Cent*)	
4. *Do you think rural boys hoping to become successful farmers (Definition 4) need specialized training, other than the experience they gain on the home farm, in vocational agriculture and farm mechanics? (Definitions 1 and 3)*	*Yes* 89	*No* 11

About 90 per cent believe rural boys need specialized training other than the experience they gain on the home farm. This feeling is not quite so strong in Ontario as in the other zones. All age groups and all groups according to their education answer the question strongly in the affirmative. It is doubtful if this would have been the case even twenty-five years ago. Farmers now are well aware of technical development in agriculture and realize the need for specialized training.

Question	***Replies*** (*Per Cent*)	
5. *Do you think it would be desirable to begin this training in vocational agriculture and farm mechanics at the high (or junior high) school level as a part of the school program?*	*Yes* 94	*No* 6

In each of the four zones more than 90 per cent believe it desirable to begin this training in vocational agriculture and farm mechanics at the high (or junior high) school level.

Says a young Ontario farmer:

> Many farm boys do not have an opportunity to go to agricultural schools as they are not often very close. The need is great for a complete agricultural course, mechanics, etc., to be taught in the local high schools to the young farmers of the future.

Says a Manitoba farmer, himself an agricultural graduate:

I do not think that education in agriculture as a phase of secondary school education should be confined to rural boys. I would think that a sprinkling of it would do urban boys good too, as there are very few professions (in Western Canada, at least) that do not have a linkage somewhere with farming and the soil.

Says a Quebec farmer:

Our present high school course prepares the pupils for university only. It should also be optional for students to get training in agriculture, household science, mechanics, and carpentry.

Question	***Replies*** (*Per Cent*)
6. *If the answer in (5) is "Yes," at what grade level do you think this training should be begun? (The approximate average age per grade is indicated). (Check one)*	*Grade VII—36*
	VIII—28
Grade VII (Age 13) .... Grade X (Age 16)....	*IX—26*
Grade VIII (Age 14) .... Grade XI (Age 17)....	*X— 9*
Grade IX (Age 15)	*XI— 1*

Over 60 per cent think this training should be begun before Grade IX level. All age groups think similarly on this question. Those with less education are more strongly in favour of beginning the agricultural training in Grades VII and VIII.

A Manitoba lady, a farm owner and former teacher, says:

I think that even in the lower grades some subjects might relate to agriculture, e.g. bookkeeping, literature (Louis Bromfield, etc.). Much could be done to bring out the beauty of farming and love of the soil, rather than emphasizing the drudgery. There is a romance to agriculture if we can only see it.

An Ontario lady, a farm owner, says:

I think an agriculture program should start in the public (elementary) schools in rural areas. Once a farm boy has several years in high school he seems to lose all interest in agriculture.

An Alberta farm owner says:

I believe that if a course in vocational agriculture and farm mechanics were offered to boys before the age of 15, it would give them the extra urge to stay in school longer and thereby become better farmers or workers, and citizens.

A Manitoba farmer says:

After Grade VIII, there is little practical knowledge offered in high schools to fit farm boys for farm work. Even club work receives little or no encouragement from most teachers, and club work is the only way at present in which most farm boys receive any help at all in any branch of farming.

III. DETAILS OF AGRICULTURAL EDUCATION

The remaining questions deal with details of agricultural education. The same definitions apply to these questions.

Table 3—Details of Agricultural Education
(Per Cent Distribution)

Question No.	Question	Maritimes & Quebec	Ontario	Man. and Sask.	Alberta and B.C.	Total
7.	Would boys stay longer?					
	Yes	96	86	91	92	90
	No	4	14	9	8	10
8.	Value of home projects					
	Very valuable	87	69	81	73	76
	Of moderate value	12	28	18	25	22
	Of little value	1	3	1	2	2
9.	a. Are there demonstration farms?					
	Yes	86	78	82	82	81
	No	14	22	18	18	19
	b. How valuable?					
	Very valuable	79	69	71	80	73
	Of moderate value	19	29	28	18	25
	Of little value	2	2	1	2	2
10.	School holidays with busy seasons?					
	Yes	73	86	65	48	72
	No	27	14	35	52	28
11.	a. Agricultural instructor on 12-month basis?					
	Yes	91	75	83	84	82
	No	9	25	17	16	18
	b. Agricultural instructor as consultant?					
	Yes	97	92	96	94	94
	No	3	8	4	6	6
12.	Advisory vocational committee?					
	Yes	92	84	86	88	86
	No	8	16	14	12	14
13.	Agricultural school for adults?					
	Yes	97	92	98	95	95
	No	3	8	2	5	5
14.	Recreation in rural high school?					
	Very important	66	65	69	74	68
	Of moderate importance	31	33	28	23	29
	Of little importance	3	2	3	3	3

Question	***Replies*** (*Per Cent*)	
7. If a program of vocational agriculture and farm mechanics were offered at the appropriate grade levels, do you think more rural boys would continue in school for a longer period than is now the case?	*Yes*	*No*
	90	10

Replies ranged from 86 per cent "Yes" in Ontario to 96 per cent "Yes" in the Maritime-Quebec zone. There is indeed a strong belief that retention of rural boys would be improved by school training in agriculture. Those who have misgivings base them mostly on conditions outside the school. Many believe that the attitude of parents is discouraging to boys.

An Ontario farmer remarks:

> Young people cannot go to school efficiently and be "hired men" at home at the same time.

The formal education of the respondees did not seem to affect their answers to this question. As might be expected, those over fifty were slightly less hopeful, but 87 per cent of them replied "Yes" as compared with 94 per cent of those under thirty. School trustees were slightly more hopeful than others, for 94 per cent of them replied "Yes."

An interesting relationship with Question 7 is noted below:

	Agriculture Not Taught	Non-Vocational Agriculture Taught	Vocational Agriculture Taught
Yes (per cent)....	94	91	85
No (per cent).....	6	9	15

While all groups are strongly affirmative, there is a slight tendency to be more hopeful of retention of pupils where agriculture is not yet on the curriculum.

Question	***Replies*** (*Per Cent*)
8. As practical experience to supplement the classroom instruction, supervised projects may be carried on by the student on the home farm. Such projects provide experience in raising or growing some product, marketing the product, and keeping complete records.	

What, in your opinion, would be the practical value of such projects? (Check one.)

(*a*) *Very valuable*	76
(*b*) *Of moderate value*	22
(*c*) *Of little value*	2

This strong endorsation of home projects, which 76 per cent believe are very valuable, shows some variation by zones, as follows:

	Maritimes and Quebec	Ontario	Manitoba and Saskatchewan	Alberta and British Columbia
Very valuable	87	69	81	73
Of moderate value	12	28	18	25
Of little value	1	3	1	2

It should be noted above that the changes are mostly between "Very valuable" and "Of moderate value." Not over three per cent in any zone think such projects "Of little value." School trustees express no significant variation from the totals reported above.

This question called forth many comments. Some forty people stressed the importance of carrying out the whole project, including cost accounting and marketing. They felt that a knowledge of economics, co-operatives, and bookkeeping should be developed from the project.

A New Brunswick farmer says:

> I have always felt that courses designed to prepare men as practical farmers should include more instruction in the keeping of accurate records and cost accounts. Too much emphasis has been placed on the volume of production rather than the cost of production.

A Saskatchewan farmer says:

> To operate a farm successfully a man has to be a cattle and hog expert, a poultry expert, soil analyst, weather man, record keeper, bookkeeper, economic expert, and forecaster of all phases of business!

A British Columbia farmer sums up this point of view:

> More stress should be laid on efficient labour methods. The keeping of books and marketing . . . should be of primary importance.

In addition to comments such as above, many made mention of the important work of agricultural representatives and requested that their efforts among boys and girls be extended. It was felt that boys' and girls' clubs were especially valuable.

Question	***Replies*** (*Per Cent*)	
9. (*a*) *Are there farms in your district which could serve as observation or demonstration farms for students in vocational agriculture?*	*Yes*	*No*
	81	*19*

In most cases farms thought to be suitable for demonstration purposes are to be found in the districts represented. The question requires little interpretation, but has an important relationship to the problem of agricultural education. For some years, the tendency in the United States has been away from school farms and in the direction of supervised home projects and organized observation of selected demonstration farms. In Canada, moreover, the development of school farms would be expensive. It is significant, therefore, to reiterate that suitable farms for demonstration purposes are to be found in most communities.

In England, the Devon County Education Committee's agricultural school program is an example of "adoption" of a neighbouring farm.

Question	***Replies*** (*Per Cent*)
9. (*b*) *How valuable would opportunities for observation on such farms be in conjunction with classroom instruction in vocational agriculture?* (*Check one.*)	
(*a*) *Very valuable*	73
(*b*) *Of moderate value*	25
(*c*) *Of little value*	2

Differences by zones are not great, and in no case are more than 2 per cent of the responses "Of little value." Farmers are convinced of the value of observation of good agricultural practices. Moreover, they are insistent that study in agriculture include practice as well as theory.

A Prince Edward Island farmer says:

Agriculture must be practiced in order to become what one would call perfect. As agriculture is the most important, or at least one of the most important, professions one can engage in, it is worth a considerable amount of planning, and cannot all be learned from books.

A Saskatchewan farmer says:

The theory must be accompanied by practical demonstrations, requiring land, livestock, machinery, etc., which would be too difficult for each high school to maintain.

Question	***Replies*** (*Per Cent*)	
10. Do you favour the authorizing of school holidays to coincide with the busiest periods of farm work?	*Yes*	*No*
	72	28

In this question there is a wide variety of responses by zone, due in all probability to different "rush seasons" in different parts of the country.

The results by zones are as follows:

	Maritimes and Quebec	Ontario	Manitoba and Saskatchewan	Alberta and British Columbia
Yes.....	73	86	65	48
No.....	27	14	35	52

It will be noted that the Alberta and British Columbia zone registered a slight majority against this suggestion. Ontario, which gives official permission to successful students to begin farm work about the middle of May, is most strongly in favour, with only 14 per cent opposed. It would appear that acceptance of this suggestion depends upon local conditions.

Comments on this question, which were few, suggested winter courses of four months and up, or part-time employment. An Alberta farmers' group suggests agricultural winter schools along the lines of the Danish Folk Schools.

Question	***Replies*** (*Per Cent*)	
11. (a) Do you agree that the vocational agriculture instructor should be engaged on a 12-month basis so that supervision of home farm projects could be continued during the summer months?.....	*Yes*	*No*
	82	*18*

In these responses, the four Western provinces yielded results similar to the totals shown above, slightly over 80 per cent in favour. The Maritime and Quebec zone showed 91 per cent in favour, while Ontario showed only 75 per cent in favour. Many of those who commented on this suggestion wondered when the instructor would have his holidays.

School trustees were less definite about this suggestion, only 61 per cent favouring it. The contemplation of extra costs in salary and transportation could have caused this difference. In schools where vocational agriculture is already taught, 74 per cent

were in favour of engaging the instructor on a 12-month basis. Despite some practical difficulties, this suggestion finds considerable favour.

Question	***Replies*** (*Per Cent*)	
11. (b) Do you think it would be helpful if the vocational agriculture instructor as part of his duties would act as a consultant for young adult farmers in the area?	*Yes* 94	*No* 6

Replies by zones ranged from 92 per cent to 97 per cent in favour of this proposal. Where vocational agriculture is already taught, 92 per cent favoured this practice. School trustees were even more strongly in favour, for 96 per cent replied "Yes." Such unanimity requires little comment. It is a realization of the importance of assisting young farmers in the early and difficult stages of their careers. It is a realization also of the importance of linking instruction with practice, of establishing continuity in training and work. Some pointed out that such service should be offered in co-operation with the agricultural representative.

Question	***Replies*** (*Per Cent*)	
12. Do you think there should be an advisory vocational committee of the school board consisting of experienced farmers and technical agriculturists in the area to advise the instructor of vocational agriculture in respect to adapting the course in vocational agriculture to local needs?	*Yes* 86	*No* 14

Establishing of advisory vocational committees is strongly favoured in all zones. No minor group of respondees showed any marked deviation from these results. It is interesting that school trustees showed no reservations as to this suggestion. This is already in effect in some Canadian agricultural schools and has been applied more widely to vocational instruction other than agriculture. In agricultural schools in the United States, advisory committees are usually formed. Comments on this question were few, and showed no definite pattern.

Question	***Replies*** (*Per Cent*)	
13. Do you think there should be agricultural schools beyond the high school level offering short specialized courses for young adult farmers?	*Yes* 95	*No* 5

In view of the fact that 95 per cent of those who replied were in favour of short courses, and only 5 per cent opposed, there can be little doubt that leading farmers are in favour of such courses. Those who responded were not satisfied with a "Yes" reply, but added many comments. Remarks were in favour of short courses and specialized training. Some favoured greater use of existing agricultural colleges or schools, and some advocated continuing education until age twenty-one.

A Prince Edward Island farmer says:

Short courses in farming, especially when given in winter time and during slack periods, are very valuable. A county agent system is also a very excellent thing.

A British Columbia farmer adds:

Facilities should be provided for a specialized course in farming for a period (12 months) after leaving school, on farms run by the students themselves under supervision.

It should be noted that some non-degree courses in agricultural colleges or schools are somewhat similar to the requirements stated above.

An Ontario farmer discusses means of continuing education:

A folk school for girls and boys from 16 years to 21 years, held once a year for 7 to 14 days, where boys and girls could get together to study, play, and work together and gain an experience in living in which much can be learned through informal discussion and exchange of ideas. Isolated from distractions—radio and newspaper forgotten—they can take time to think and develop ideas and discover talent within themselves not thought possible. Plenty of discussion leaders can be found in various departments of agriculture, among high school principals, recreation leaders, local clergy, etc. In fact there is an unlimited range of possibilities.

Question	***Replies*** (*Per Cent*)
14. *How important is it to include adequate provisions for recreation (sports, dramatics, etc.) as a part of the program in rural high schools? (Check one)*	
(*a*) *Very important*	68
(*b*) *Of moderate importance*	29
(*c*) *Of little importance*	3

By zones, the replies to this question are remarkably consistent. Not over three per cent in any zone think recreational facilities of little importance. The Alberta and British Columbia zone showed slightly more "Very important" replies, up to 74

per cent. To this question, the replies of school trustees form a pattern almost identical with the sample as a whole. As might be expected, there is some difference in replies from different age groups.

	Under 30 (Per Cent)	30–50 (Per Cent)	Over 50 (Per Cent)
Very important	74	69	63
Of moderate importance	25	28	33
Of little importance	1	3	4

It is apparent that younger respondees are more concerned about recreation. Nevertheless, those who are older consider it of importance.

There were many comments about recreation in farm communities.

A Nova Scotia farmer's wife says:

Wherever possible, rural high schools should be located in rural areas to furnish rural people with community centres and to help stop the flow of rural youth to the towns for amusement . . . Some training should be given to both boys and girls in rural beautification.

A Prince Edward Island farmer says:

Sports and dramatics give people the advantage of being able to express themselves and live together as a community rather than as individuals.

A Saskatchewan farmer says:

It is my opinion that sports, dramatics, etc. are sadly neglected in our rural schools. With these given more recognition in the curriculum more leadership would be inspired in the students, who in turn would remain in the rural community and help stimulate social activities in the district. With more activity of this nature in rural districts our boys would be more content to remain on the farm. It is the leadership that is lacking in many districts.

A Nova Scotia teacher takes a different view of the problem:

Great care should be taken in introducing sport in the school program—if introduced for recreational value and physical health—types that will not distract the minds of youth from the farm should be given first consideration. If children are brought up, in school, to get their recreation from basketball, tennis, football, baseball, etc. these will influence them in later life. We follow in later years the pursuits of childhood. If childhood recreation is filled with rural pleasures such as horseback riding, fishing, flower gardening, improving home grounds, caring for young farm animals, swimming, skating—i.e. mixing healthy useful activities with recreation, youth are more apt to feel an attraction for such purely rural activities and derive much pleasure as well as recreation from them.

IV. FURTHER COMMENTS

Question

15. *Comments on the above questions, or further suggestions you would like to make about education for rural boys expecting to engage in agriculture.*

The many and varied comments which were made have been combined under the following headings, arranged in order of frequency of mention:

(*a*) *Economic and Social Conditions*

Many feel that the problem of interesting more rural boys in farming is primarily economic and social. The following comments are typical.

A New Brunswick farmer:

> All your education is of little value to the rural boys who would like to be farmers but know from experience that there is not profit enough in farming if they ever expect to have the comforts of good living.

A Saskatchewan farmer:

> The main drawing cards to take boys from the farm are easier jobs and better pay as well as shorter hours.

A British Columbia school principal:

> I have seen *all* my pupils of average intelligence or over leave the farm. To keep these boys on the farm it will be necessary to provide them with the same recreational possibilities and their parents with the same comforts of life as those enjoyed by people of other occupations.

A Quebec farmer:

> To encourage boys to maintain an interest in agriculture and take it up as a career, sufficient inducement must be provided to overcome the attractions offered more and more by other careers; Viz:—steady income, medical care, insurance, pensions, etc. Very few boys can start from scratch today without outside help, and become financially independent farmers. Yet in competition the armed services, public utilities, banks, etc. offer reasonable wages, benefits and so forth, and eventual retirement at a decent age without the worry, long hours, and physical expenditure necessitated in building up a farm from scratch.
>
> Boys who can look forward to family subsidization, to start off with milking machines, tractors, and so on, will probably become farmers regardless of local agricultural education—or lack of it. The farm boy knows the uselessness of modern methods until he can earn (a) the money to get a farm, and (b) enough to buy machinery. He knows he will never earn it as a farm helper, and I imagine it is an undisputed fact that if he works with his father he can only hang on until some day he can take over on his own.

(*b*) *Promotion of Agriculture*

Many believe that there is a need to promote agriculture as an occupation of importance and dignity.

An Ontario farmer says:

> Boys feel that only those who cannot learn to do anything else are left to farming, therefore they want education so they can obtain a position in town and not be classed as *just* farmers. We must make farming . . . look to the boys just as "bright" as the lights of the city.

A Quebec farmer:

> At all high school career conferences some very able speaker should present agriculture as a career in as able a manner as any other career.

A Manitoba lady, a farm owner:

> I feel deeply that a happy life on a farm is the ideal existence for both boys and girls, and that this can be made possible by parents setting the example of good citizenship through successful farming and co-operation with their children—advocating and welcoming all technical resources which tend to foster pride and ambition in this finest of all lives.

(*c*) *Equal Need of Training for Rural Girls*

Many noted that the questionnaire dealt only with education for rural boys. They felt that it is equally important to educate girls for rural life.

(*d*) *Teach Agriculture to Urban Children*

Quite a few mentioned that urban children should know more about farming and rural life. This suggestion came mostly from Ontario, where a young farmer says:

> Whenever possible, city boys interested in farming could be placed on local farms under capable practical farmers during holiday seasons and credited on their term's work for knowledge thus obtained.

(*e*) *Cost of Education*

A number thought the ideas suggested in the questionnaire were good but feared the cost of such programs. A Saskatchewan farmer and school board secretary says:

> I have attended several school trustee conventions lately, and it was apparent there is difficulty in financing what education we now have. The need for Federal assistance was also apparent. I see no hope of improvement (in agricultural education) without such assistance.

(*f*) *Need of a Definite Agreement Between Father and Son*

A number mentioned the importance of a businesslike arrangement between a farmer and his boys. This is expressed well by a Saskatchewan farmer:

Parents could assist in farm management training by allowing a son taking vocational agriculture training to operate a portion (one quarter section) of the home farm for himself on his own ideas.

To illustrate, one might make a deal with a teen age boy to work the land on a fifty-fifty basis—parent supply all equipment, son supply labour. According to size of farm, one quarter section or a half section to be operated according to the boy's own ideas without interference. . . . As he becomes efficient, allow him to take over gradually entire management of the farm on whatever basis is agreed on between father and son. It might perhaps be a good thing to make this conditional on taking vocational agriculture training at technical school or short courses at the university for the first two or three years.

(*g*) *Others*

Other comments cover such widely different suggestions as:

(1) More trained agriculturists should farm.
(2) Need of school lunch program.
(3) More use of films in school.
(4) Need of up-to-date reference libraries covering agricultural information.
(5) Opposition to dormitory schools.
(6) Specialization in few subjects till mastered.

V. PROVINCIAL CONFERENCES RELATING TO EDUCATION IN AGRICULTURAL COMMUNITIES

As has been mentioned, The Canadian Research Committee on Practical Education released in September, 1948, a report called "Secondary School Education in Agricultural Communities." The findings[1] aroused considerable interest, and conferences were held by the provincial advisory committees in most provinces.

In Prince Edward Island Mr. M. MacKenzie, Chairman of the Provincial Advisory Committee, met with the Executive and Chairmen of Committees of the Prince Edward Island Agricultural Council. The following quotations were taken from a report of this conference held in Charlottetown on March 8, 1949:

One member felt that in this province "weak teachers" were in a large measure responsible for the many pupils leaving school at an early age. With about 85 per cent of our schools rural one-department institutions and the teacher, often a young and immature girl, responsible for the work of all grades from I to X inclusive, this attitude is understandable. Most of the members felt that in this province general indifference to the value of high school education was an important reason for rural boys leaving school at or near the completion of Grade VIII . . .

. . . . . .

[1]See page 3.

Several were of the opinion that a good sound academic education was, perhaps, the best thing for young farmers. The agricultural education could come later in regular courses and short courses provided at central institutions better equipped to give this service than numerous rural high schools. Of course it was admitted that it might be difficult to get these boys back on farms once they had a taste of success in the strictly academic field, particularly so in this province where boys and girls must attend an institution in an urban area away from home in order to complete their high school training. "It seems," as one member stated, "that we must endeavour to instil a love of the land in the minds of our young people." . . .

. . . . . .

All agreed that the "school and home-farm co-operation concept" was the most desirable, while there seemed to be general disapproval of the idea of the school operating a farm to provide actual practical experience.

The chairman pointed out that "our program is necessarily restricted by difficulty of finances."

In Nova Scotia, through arrangements made by Dr. W. V. Longley, Director of Extension Services, Nova Scotia College of Agriculture, four representatives of agriculture joined with the Provincial Advisory Committee in a special session held in Halifax, on April 23, 1949, under the chairmanship of Mr. E. K. Ford, Director of Vocational Education. The report reads in part as follows:

The following points were emphasized:

(1) That secondary school education in agriculture is desirable if it is practical and if it is in the hands of competent instructors.

(2) That the economic factor in agriculture must not be overlooked.

(3) That parents might do more to encourage young people to make farming their profession.

(4) That the school program recognize age level rather than academic grade qualifications for entrance requirements.

(5) That a modified apprenticeship system for farmers be considered; also a special short course, in place of the regular courses, be offered to non-academic students.

The Provincial Advisory Committee for the province of Quebec (Montreal Section) held a special meeting at Ormstown on January 21, 1949. Arrangements were made by Mr. D. C. Munroe, now Director, School for Teachers, Macdonald College, and Mr. Gabriel Rousseau, Technical Adviser, Apprenticeship Branch, Department of Labour.

The meeting generally approved of the teaching of home economics, agriculture, and farm mechanics . . . It was felt that our educational program can be improved only if we can find in sufficient numbers qualified teachers to serve in rural schools.

The Ontario Advisory Committee invited to its meeting on December 10, 1948, the members of the Education Committee of the Ontario Federation of Agriculture. Mrs. C. A. Campbell was chairman of this Education Committee. From this beginning, and after further discussions and sub-committee meetings, a "Statement of Needs" was prepared. This was adopted by the advisory committee on May 15, 1950, and may be paraphrased as follows:

1. The agricultural community wishes to be considered for educational purposes on the same basis as all others. People in rural areas feel that the educational goals in the country are not different from the educational goals in the town. In all schools emphasis should be placed upon a good basic education for life, with a course of study sufficiently flexible to be adjusted easily to the type of community in which the school is situated.

2. Care is needed to disentangle educational problems from economic problems. It is unwise to confuse the question by discussion about educating away from the farm or towards the farm or increasing the number of farmers or stressing the importance of farming. The number of farmers is determined in larger degree by economic forces than by educational forces. Nothing in any education program in a rural community should in any way reduce the importance of agriculture. On the contrary, any good education program utilizing the local environment will enhance the importance of agricultural life.

3. The aim of education in rural communities is the same as in any other community, to provide a suitable environment for growth. To provide this environment, four factors must be considered:

   (a) The age of the student.
   (b) Individual differences.
   (c) Variety of educational techniques and equipment necessary for individuals differing in abilities, interests, and age.
   (d) Use of the local environment to gain full advantages of the superior though oft-neglected opportunities of the countryside.

4. Problems of rural education may be overcome by:

   (a) Larger units of administration responsible for both elementary and secondary education, including vocational education.
   (b) Changes in organization to provide elementary education, secondary education up to age sixteen, and further specialized training either through short courses in the local school or through longer courses at special institutions in the province. School sessions should be so arranged as to avoid busy periods of farm work.
   (c) Accommodation and equipment including gymnasia, auditoria, and shops as are provided in city schools.
   (d) A curriculum which relates to the environment provided by nature.
   (e) Selection and training of rural teachers of equal ability with those teaching in urban schools.
   (f) Financial aid to worthy students.

The MANITOBA Provincial Advisory Committee arranged a one-day conference in Winnipeg on March 12, 1949. Plans were made by Mr. R. J. Johns, Director, Technical-Vocational School, Winnipeg, and Dr. J. K. Friesen, Director of Field Service and Public Relations, Manitoba Pool Elevators. Conference Chairman was Mr. Harold S. Fry of the Agricultural Institute of Canada. All but four of the 34 people present were non-members of the advisory committee. The majority represented school trustees' associations, unions of municipalities, the Federation of Agriculture, and co-operatives. The remainder represented farm organizations not mentioned above, or were clergy, university officials, or Department of Education officials. The conference as a whole was highly representative of educational leadership in the province.

After a morning of general conference, three committees were formed, one for each of the following topics:

1. Needs and Aims in Vocational Agriculture.
2. Type of Course for Vocational Agriculture.
3. The Teacher of Vocational Agriculture.

The conference closed with a general session which adopted the reports of the three committees.

The first committee considered needs and aims in vocational agriculture and concluded that:

1. The secondary schools are not yet doing a good job of training boys to become successful farmers, owing primarily to the very late start made by the province in revising the curriculum and making vocational training available.
2. There should be a definite program of vocational agriculture for the rural secondary schools of Manitoba, and the curriculum now under revision will provide such a program and will be flexible enough to meet the needs of particular and local situations.
3. Federal grants-in-aid are needed for vocational agricultural programs because vocational agriculture offers a special problem, and also because the cost of education in farming areas is higher than in urban districts.
4. The first committee passed the following resolution:

   "That since in rural areas the number of pupils reaching Grade VIII in perhaps 76 per cent of the provincial average, this committee recommends that the problem of improving elementary education in rural areas is inseparable from the problem of providing any program of vocational training in secondary schools."

5. The first committee also made a general recommendation:

   "For immediate action there should be an improvement in elementary education. There should be also greater emphasis on and financial

support for short courses in selected communities and for short courses and diploma courses in the University of Manitoba. There should be endorsation and encouragement of the school area plan.

Scholarships should be made available so that worthy students can go to university now. We need to educate parents first in giving their sons and daughters the opportunity to attend short courses sponsored by the Extension Service."

The second committee considered the type of course for vocational agriculture:

1. Members of the committee were in complete agreement that the teaching of vocational agriculture at the high school level is not only feasible with the existence of the new curriculum approved by the Department of Education, but also most advisable. It was emphasized throughout this particular part of the discussion that enduring attitudes towards agriculture as a career must have their beginnings in school studies. In fact, it was pointed out by certain members of the committee that, since worthwhile attitudes are acquired only through satisfying experiences, purposeful learning related to any occupational field must be included in school curricula. Consequently, the committee favoured the teaching of vocational agriculture in the high school grades.

2. The successful farm operator needs to know the scientific principles of land use, crop and animal production; the principles of farm practice and management; and the business practices which will ensure the success of the farm enterprise. The course (in vocational agriculture) should be taught in a way that will emphasize the significant contributions agriculture makes to the community, the province, the nation and, the world."

The entire conference resolved that the University of Manitoba be urged to recognize the technical courses as filling the entrance requirement to further study at the university level.

The SASKATCHEWAN Provincial Advisory Committee held a special meeting arranged by Dr. J. W. Tait, Director of Teacher Training, at Saskatoon on December 18, 1948. The conclusions may be paraphrased as follows:

1. Educational deficiences are not entirely chargeable to formal education. Social and economic factors must be considered. The low educational level of farmers is related both to the status of agriculture and to the defects of the educational system.

2. There is danger both in too great stress on practical education at the expense of general education, and in too early specialization.

3. Training is essential to real success in farming.

4. School staffs and facilities in the country are not equal to those in urban centres.

5. Emphasis should be placed upon education for life.

6. Rural high schools should teach vocational agriculture, but larger and more competent staffs would be needed to teach the course properly

and to relate the program to agriculture in the community. Thus far, schools have not seriously attempted to promote agriculture as an important and highly honourable occupation requiring broad education and specialized training as in other skilled occupations.

In British Columbia, two conferences were arranged under the chairmanship of Mr. Neill M. MacGregor, Instructor in Agriculture, Chilliwack Junior-Senior High School. These conferences included farmers, agriculture teachers, other teachers, high school principals, school inspectors, and technical agriculturists. The first conference, held at Abbotsford in the Fraser Valley on November 19, 1948, had an attendance of 33. The second conference, at Vernon in the Okanagan Valley, on November 26, 1948, had an attendance of 26. Mr. MacGregor presented a summary of the discussions to the British Columbia Advisory Committee meeting of December 6, 1948.

The report made to The Canadian Research Committee on Practical Education by the British Columbia Advisory Committee on December 13, 1948, reads in part as follows:

It was of great interest to our Committee to find that both conferences agreed almost completely with the results of the report "Secondary School Education in Agricultural Communities." It indicated very definitely that immediate steps should be taken to set up vocational training in agriculture in the secondary schools of British Columbia where agriculture is a large factor in the life of the community.

The findings of the two conferences made it very clear that an urgent need for trained teachers of vocational agriculture exists in the province . . . that a training program should be implemented immediately to train vocational agriculture teachers with the ultimate objective of a degree of Bachelor of Agriculture in education. This program should include a special combination of courses which every teacher must take, with specialized training in the teaching of vocational agriculture.

Our Committee agreed with the response of the Vernon Conference to the question "What do you consider to be the necessary qualifications of a teacher of vocational agriculture?" namely, a practical farming background; specialized teacher-training; and university graduation *or the equivalent.* It was the opinion of the Committee that, although it is desirable to have university graduates as teachers, the urgent and immediate need for teachers in this work makes it necessary to consider accepting men of broad practical experience to carry on with the teaching of vocational agriculture until the university can set up a training program and turn out qualified men in sufficient numbers to fill this need.

It is of interest to note that the farmers present at the conferences decided to introduce resolutions at local meetings of the various farm organizations, requesting them to "Urge the provincial Department of Education to take immediate steps to institute a program of vocational agriculture for high schools and to press for expanded Federal Aid."

Trends of thought in the provincial conferences may be summarized:

1. The most urgent problem in the development of rural education in Canada is the securing and training of suitable teachers.

2. Vocational agriculture should be taught in secondary schools, but there is strong insistence that a sound general education must not be neglected. Farmers require both a broad education and a high degree of technical training.

3. It should be recognized that economic conditions in agriculture have affected the attitude of boys towards farming as a career.

4. Improvement in secondary education is inseparable from improvement in elementary education. Both must equal urban education in accommodation, facilities, and curriculum. Basic general education is desirable, with a curriculum related to the local community.

5. Larger units of administration are desirable. Financial aid should be given to worthy students from rural areas. These students would otherwise be more greatly handicapped than would urban students of limited means.

6. Federal aid may be necessary to finance improved programs of rural education. With regard to vocational agriculture, it should be noted that few rural districts have developed agricultural schools to take advantage of assistance under the various Federal vocational assistance acts. On the other hand, it was by extensive financial assistance from the central government, that agricultural education reached its high state of development in the United States.

VI. SUMMARY AND CONCLUSIONS

Summary of Replies to the Questionnaires

1. The teacher is considered to be of first importance, the curriculum second, and the school facilities third in importance in contributing to an effective program in the rural high school.

2. While the majority feel that the program of studies has little influence on the decision of rural boys to stay on the farm or to leave it, many believe that present programs tend to educate boys away from the farm. Inclusion of agriculture in the program is thought to create among rural boys a more favourable reaction to the possibilities of farming as a career. The attitude of the teacher is considered to be a strong factor in influencing boys either for or against agricultural occupations.

3. High school courses in agriculture are offered in about one-half of the communities represented in this survey. About one-half of these agriculture courses are vocational in character.

   About 50 per cent think the agriculture taught in the local high school is of moderate value. There is a stronger endorsement of the program when it is vocational and particularly when it includes farm mechanics.

4. Ninety per cent think specialized training in agriculture is necessary today for the boy who is to become a successful farmer.

5. There is almost unanimous agreement that this training in vocational agriculture and farm mechanics should begin at the junior school level.

6. Ninety per cent believe that a good program of vocational agriculture and farm mechanics will increase the retention of rural boys in school.

7. There is a strong endorsement of the supervised home project as an important part of a vocational agriculture program.

8. Eighty per cent report that there are in their districts suitable farms to be used for demonstration or observation farms for students taking vocational agriculture.

   There is almost unanimous agreement that observation of such farms in conjunction with classroom instruction in vocational agriculture would be valuable.

9. About seventy per cent favour the authorizing of school holidays to coincide with the busiest periods of farm work.

10. Eighty per cent think the vocational agriculture instructor should be engaged on a 12-month basis so that supervision of home farm projects can be continued during the summer months.

    Over ninety per cent think it would be helpful if the vocational agriculture instructor as a part of his duties would act as a consultant for young adult farmers in his area.

11. Eighty-six per cent favour the idea of an advisory vocational committee of the Board to advise on the content of local courses in agriculture.

12. Ninety-five per cent think there should be agricultural schools beyond high school to offer short courses for young adult farmers.

13. There is almost unanimous agreement that provision for recreation in rural high schools is important.

14. In addition to comments pertaining to the various questions there were many further comments and suggestions. Of these the most common topics were the economic and social aspects of agriculture and of rural life.

Conclusions

The conclusions stated below are based on the Committee's two questionnaire studies and upon other opinion and research referred to in this report:

1. Retention in school is not so high for rural pupils as for urban pupils.

2. The farm population has not had so much formal schooling as the urban population. Many farmers have had no special training. To be successful today a farmer should have a good general education and also technical training.

3. There has been an improvement in rural education in recent years. This has been accomplished chiefly through the formation of larger school units. These make possible better school facilities, a more varied curriculum, and more highly qualified teaching personnel.

4. Improvement in secondary education is possible only when the elementary schools provide an adequate basic education. This requires well qualified teachers who have a knowledge of rural life and a sympathy towards it.

5. A good rural high school program will provide a flexible curriculum which will meet the requirements of:

   (a) those who will engage in agriculture or in occupations related to it;
   (b) those who will seek the necessary qualifications to enter the professions (including technical agriculture);
   (c) those who will seek employment in urban centres.

6. In the rural high school the teacher should take an active interest in the community and should participate in rural activities.

7. The content of courses should be related to the local environment. In junior high school grades the program of studies should:

   (a) give a sound basic education;
   (b) offer exploratory courses in languages and practical work;
   (c) include science, taught in relation to agriculture;
   (d) provide adequate guidance.

8. In senior high school grades the program should be an integrated one with a basic core of general subjects. The program should provide:

   (a) a college preparatory course, with such electives as the school organization will permit;
   (b) a general course with practical electives, one of which would be agriculture; or,
   (c) if the school is large enough, a vocational course, one department of which would be vocational agriculture and farm mechanics;
   (d) adequate guidance.

9. If the school has a vocational agriculture department there should be an advisory committee to the Board, consisting of experienced farmers and technical agriculturists to advise how best to adapt the course in agriculture to local needs.

10. The course in vocational agriculture and farm mechanics should:

    (a) have a strong core of general education subjects;
    (b) be a practical course giving basic training in important phases of farming;
    (c) be related to the special agricultural features of the area;
    (d) use the home-farm project method which would be supervised by the instructor throughout the year;
    (e) make use of good farms in the area for observation and demonstration purposes.

11. The value of practical experience as a part of the course in vocational agriculture should be recognized fully. The school term should be adjusted so that boys taking the course can work on the farm during the busiest periods. This should be looked upon as an opportunity to secure educational experience rather than to provide additional labour supply.

12. The instructor in vocational agriculture should:
    (a) be a graduate of an agricultural college;
    (b) have adequate practical farm experience;
    (c) have special teacher-training in vocational agriculture;
    (d) work closely with the representative of the Department of Agriculture.
13. The instructor in farm mechanics should:
    (a) have a broad mechanical training;
    (b) have a special knowledge of farm equipment;
    (c) have special teacher-training in farm mechanics.
14. The program of vocational agriculture should carry beyond high school. The instructor should be available as a consultant for young adult farmers and should act in co-operation with the representative of the Department of Agriculture. The school should offer evening classes and/or special short courses for farmers in the area. There should be close co-operation between the Departments of Agriculture and Education.
15. Beyond high school level special regional agricultural schools offering advanced courses might serve a useful purpose.

These conclusions should not be interpreted as criticisms of the excellent training in agriculture already carried on by provincial departments of agriculture and by universities. Secondary school training in agriculture would reach a far greater number of students and would lay a foundation for other agencies already engaged in agricultural training. Co-operation among all such agencies is highly desirable.

Correction

It is regretted that an error was made on the inside front cover of the March, 1951, issue of this magazine. The positions of Past President and Vice-President were reversed. They should have read as follows:

Past President

Dr. L. W. Shaw, Deputy Minister of Education for Prince Edward Island.

Vice-President

Dr. H. P. Moffatt, Deputy Minister of Education for Nova Scotia.

Agriculture in the Secondary Schools of Ontario

E. R. McClellan

Inspector of High Schools, Department of Education, Toronto, Ontario

There has been an increasing demand for more instruction in agriculture in the secondary schools of the province. More than ever before, rural people are looking to the high school to provide courses which will better equip the farm boy or girl to meet the practical problems of living and at the same time give the urban pupil an appreciation of rural life and of the environment of forty-five percent of Canada's population.

The farmer of to-day requires not only a thorough knowledge of the "three R's" but also a working knowledge of the sciences directly related to agriculture and the art of applying the knowledge in his day-by-day work. Agriculture is therefore both an art and a science. As a science it is concerned with an organized body of knowledge which has been developed out of the problems affecting life on the farm. As an art it is concerned with the skills required to produce utilities for man. We may rightfully call it applied science. When agriculture is properly taught, soil management and conservation, crop production, animal nutrition, plant and animal breeding will become more important to the boy and girl and will give them a proper conception of rural life.

Urban workers in industries directly related to agriculture are finding it advantageous to have an understanding of farm problems. The business man, the doctor, lawyer, or teacher must have a knowledge of agriculture to take his place in a complex society.

Agriculture as it is being taught in Ontario schools is considered not as a strictly vocational subject but as knowledge essential to all pupils irrespective of the vocation they may pursue. It will have vocational value to the boy who takes up farming, while those who follow other pursuits will find that it makes the study of the sciences more interesting and will give them a broader outlook on life.

The first attempt to teach agriculture in the schools of the province was made in 1837. The people were not ready for agricultural instruction in the schools, and the recommendations of the Education Bill were not implemented.

In 1847, Dr. Ryerson, Superintendent of Education for Upper Canada, proposed the establishment of model farms and the teaching of agriculture in the grammar schools. The plan was to purchase a plot of land, not exceeding two hundred acres, for the purpose of a model farm. Twenty agricultural schools were to be set up in Upper Canada. Dr. Ryerson failed to get support and the bill was withdrawn. He did, however, introduce agricultural instruction in the first Normal School of the province, opened in Toronto in 1847.

Since 1893 some provision has been made in the regulations of the Department of Education for the teaching of agriculture in the elementary and secondary schools. The first effective development in secondary schools occurred in 1907 when six graduates of the Ontario Agricultural College were appointed to teach agriculture and represent the Ontario Department of Agriculture in the centres of Essex, Collingwood, Galt, Lindsay, Morrisburg, and Perth. The graduates were not trained in the fundamentals of teaching and found that the demands of the older farmers and of their office left them little time to prepare work for the school. This dual responsibility was terminated in 1913. The Ontario Agricultural College graduate stayed in the town and represented the Ontario Department of Agriculture. This was the beginning of the Agricultural Representative Service of this province.

The teaching of agriculture was delegated to the science teachers who obtained the required qualifications by attending summer courses at the Ontario Agricultural College. About 1922 the regulations for admission to the Ontario College of Education were changed to include graduates from other than Arts courses. This allowed graduates of the Ontario Agricultural College to qualify as secondary school teachers.

Teachers of agricultural science must hold an intermediate certificate in agriculture, while teachers of agriculture must have specialist's standing and some farm experience. Approximately one third of the teachers actively engaged in teaching agricultural science and agriculture are Ontario Agricultural College graduates.

Since 1937 the courses have been called Agricultural Science and Agriculture. The Agricultural Science courses consist of the

basic science courses of Grades IX, X, XI, and XII with special application to various phases of agriculture. This treatment tends to keep the science alive and prevents to a large degree abstract teaching of nature's laws. Pupils study the incubation and development of the chick, soils and soil science, organic matter and fertilizers, home and school gardening, the origin and characteristics of the common breeds of live stock and poultry, the production of clean milk, the Babcock test for fat, economic insects and fungi, crop rotations, landscape gardening, and home beautification. Of 423 secondary schools in Ontario, 182 are teaching agricultural science.

The Agricultural Department of the High School

The courses in agriculture offered mainly to boys of Grades IX to XII inclusive are provided under the *Regulations relating to Departments of Agriculture in Secondary Schools*. The establishment of departments has been encouraged since 1913. In June, 1944, 161 schools were teaching agricultural science and 12 had Departments of Agriculture. In that year the regulations pertaining to the establishment of Departments of Agriculture were revised, a new general grant scheme for schools was announced, and many areas in the province planned to establish larger high school districts. Since then, there has been a progressive increase in the number of schools establishing Departments of Agriculture. Of the 182 schools teaching agricultural science in the current school year, 70 have established such departments. In these schools agricultural science and agriculture have become established as major subjects on the curriculum.

The vocational schools at Chatham and Belleville have established Departments of Agriculture. Approximately fifty boys are enrolled in the classes in each school.

Six additional high schools are planning to introduce agriculture in September, 1951.

In order to obtain recognition for a Department of Agriculture, a school must be able to provide:

1. Inspection and supervision of home projects;
2. Promotion work by the principal among the rural residents;
3. An annual Open Night or Achievement Day;

4. The serving of a hot dish at the school to supplement the lunch of the pupils;
5. Community use of the school plant.

Home Projects

All pupils of Grades IX and X are required to conduct a home project of an agricultural nature. Rural pupils for the most part select projects of an economic nature such as growing a crop, raising live stock and poultry, or conducting fertilizer experiments on pastures and crops. A list of suggested projects is posted in the school during the fall term and the teacher gives assistance in the selection of projects. Urban pupils have a limited choice, but both urban and rural pupils have found the following of interest: improving the home grounds or building; use of chemical weed killers; effect of fertilizers on the garden or lawn; the home vegetable garden; management of a hot-bed or small greenhouse; starting a home work shop; canning of fruit. In some schools we find that the pupil is conducting his project at the school. He may be conducting an experiment in the school garden, managing some phase of the agriculture program during week-ends or during the vacation, or setting up a special display for the annual Open Night.

The teacher is expected to visit the pupil at least once during the summer months, oftener if he thinks it is necessary. It is hard to over-estimate the value of this contact and assistance. The teacher sees the pupil in his home surroundings, meets the parents, and closer co-operation between the home and the school is bound to result.

Approximately 10,000 pupils conducted home projects during 1950. Close to 3,000 were enrolled in Club work with 2,500 of these in projects conducted in close co-operation with Agricultural Representatives of the Ontario Department of Agriculture. Seven hundred participated in calf club work, two hundred in grain clubs, close to two hundred in tractor clubs, and six hundred in garden clubs. Over 1,000 high school pupils took part in county live stock and seed judging contests. One hundred and twenty-five represented their schools and counties in provincial contests.

One of the outstanding examples of the value of close co-operation with the Agricultural Representative is shown by the report of Palmerston High School situated in Wellington county. Of the 200 pupils enrolled, 100 participated in the local ploughing match in 1950 and 94 were in club work.

Our high school pupils are taking a keen interest in conservation and reforestation. From the reports we have received from the schools, close to 100,000 trees were planted on the home farms of pupils in 1950. Five hundred secondary school pupils were enrolled in forestry clubs during the past year. The trees are secured free of charge from the Provincial Forestry Stations.

The policy of encouraging projects on the home farms of the pupils makes it unnecessary to cultivate a large acreage at the school. Projects in growing some crop or raising live stock or poultry mean much more to the pupil and the parents when these activities are carried on under the actual conditions of the home farm. The pupil has the assistance and counsel of his parents and is on hand to follow the daily progress of his project and give it the necessary attention. The experiment is carried on by those directly interested and concerned.

Through project work the pupil may introduce a new variety of potatoes, oats, barley, or wheat to his community. He may be the first in his neighbourhood to grow hybrid corn or soy beans. Small amounts of seed of new varieties of farm crops may be grown at the school for the first year or two until sufficient seed is available for distribution. By conducting projects at home, boys and girls are able to put into practice knowledge gained at school. They may conduct experiments with a view to increasing the yield of certain crops, improving pasture areas, eradicating areas of perennial weeds, increasing the milk production of the herd, the egg production of the flock, or beautifying the home surroundings. A boy may wish to remodel or repair some farm building, put in working condition some piece of discarded farm machinery, or equip a home workshop.

Farm tasks such as ploughing, disking, harrowing and cultivating are no longer routine jobs but activities in which the boy thinks of soil conservation, the role of organic matter, the conservation of moisture, capillary action, surface tension, soil bacteria, and seed germination.

Much can be done and much is being done in these projects in improving the home surroundings of pupils. Home improvement is a popular project. It may include the planting of flowers, trees, and shrubs, the levelling and improvement of lawns, the painting of the farm home or barns, the remodelling or improving of some buildings on the farm, the removal or erection of fences. Many boys and girls become interested for the first time in making their homes more attractive.

Service clubs render valuable assistance in project work. They have sponsored calf clubs, swine clubs, poultry clubs, grain and potato clubs. A member "adopts" a boy or girl, visits the pupil and assists with the project. The encouragement of such interest is great.

Boys and girls learn by doing. By conducting home projects they learn basic skills and gain knowledge regarding their projects. They assume responsibility, make decisions, and develop character by practising the traits that go to make character.

Promotion Work by the Principal

Much valuable work is being done by the principals of schools with Departments of Agriculture in visiting the homes of prospective pupils during the summer vacation period. Courses offered at the school are discussed, and the boys and girls are encouraged to reveal their ambitions. This personal contact is invaluable in fostering a good relationship between the parents and the school. The teacher of guidance often accompanies the principal on his visit.

Annual Open Night or Achievement Day

Schools with Departments of Agriculture are required to hold an Open Night or Achievement Day. An excellent opportunity is provided to display the practical work of the pupils and to show visitors a cross-section of the work of the school.

Displays of pupils' work from the Shop, Home Economics, Art, Geography, and Agricultural Departments are always of interest. Pupils participate in demonstrations which may relate to science, typewriting, art, physical education, shop work, home economics, or agriculture.

The classes in agriculture may set up displays or conduct demonstrations featuring topics such as the following: the Babcock test for milk, pasteurizing milk, grooming an animal for showing, showmanship, acidity test for soils, tests for nitrogen, potassium, phosphorous and calcium, conservation of moisture in soils, germination tests, economic fungi, rations for live stock, dairy stables, modern equipment for poultry houses, incubation and brooding of chicks, caponizing, candling and grading eggs. In most schools all departments are represented in one way or another.

The Open Night or Achievement Day is an established function of the school year.

Hot Lunches

Most of the large established schools and the new schools of the province have a school cafeteria. Schools with Departments of Agriculture are encouraged to provide facilities for serving at least one hot dish at noon. Many rural pupils leave home quite early in the morning, and the hot dish is a welcome addition to the cold lunch. If suitable storage accommodation is available, schools are making use of much of the produce grown in the school garden. The Elmira High School uses the garden produce and serves a complete lunch for 10 cents to pupils during the winter months.

Community Use of the Schools

Boards of schools serving rural areas are urged to open their school buildings in the evening or on Saturdays to responsible organizations. This means that in many sections of the province the school is the community centre and is being used almost every evening of the week.

Night classes are conducted each year in most of the rural high schools. Courses are offered in agriculture, woodworking, motor-mechanics, leatherwork, home economics, art, commercial work, public speaking, and dramatics. Hundreds of immigrants attend classes in basic English.

The school is the meeting place for the junior farmers, local fair board, Federation of Agriculture, Women's Institutes, church organizations, Girl Guide or Boy Scout groups. With the establishment of larger high school districts in the province and with rural representatives on the school boards, rural people have taken new interest in the management of the school and refer to it as "our" school, no matter where it may be situated.

Courses

Teachers are urged to modify the suggested courses of study to meet the needs of their respective districts. The basic topics will, however, be taught in most of the schools. Suggested courses are available for Grades IX to XII, inclusive. In most schools the boys are taking the work in agriculture in addition to the other subjects of Grades IX and X; in some it is taken in lieu of another subject. Although there is no sex barrier, few girls are taking the course in agriculture. They receive additional time in home economics while the boys take agriculture or may take art, music, or commercial work. In Grades XI and XII we find that agriculture

is taken as an additional option or in lieu of a language, commercial work, art, or music. We find that most boys taking agriculture in Grades XI or XII are also taking shop work. Seventeen schools are offering instruction in agriculture in Grades XI and XII during the present school year.

The reader will note that all pupils taking agriculture are also receiving instruction in agricultural science in Grades IX to XII inclusive, as their basic science course.

Content of Courses

An effort is made to make the courses practical in nature. Most of the time allotment of two to three hours per week is devoted to experimental work in the laboratory and to work out of doors in relation to the gardens, apiary, poultry projects, or to visits to nearby farms for live-stock judging.

Teachers are urged to use specimen material and conduct experiments as often as possible. Pupils are not "told" about stem rust of grain, but see the rust on the straw and make use of the microscope in studying the nature of the spores and intermediate host. This study of bacteria and fungi makes microbiology a living science. Laboratory work in soils is supplemented by field trips and by observations and activities in the school garden.

All schools teaching agriculture have an up-to-date reference library covering every topic of the course of study. Farm magazines and periodicals come to the schools regularly.

The courses of Grades IX and X give attention to school gardening, poultry, dairying, horticulture, soils and fertilizers, farm machinery, farm arithmetic, drainage and land surveying, livestock judging, principles of breeding, feeding and management of livestock, rural economics, farm forestry, beekeeping, home beautification and landscape gardening, conservation, safe driving, and rules of the road.

The Grade XI and XII courses are more scientific in nature and include topics on commercial production of fruits and vegetables, culture of special farm crops, land surveying, plant and animal breeding, genetics, chemistry on the farm, bacteria and fungi of the farm, animal nutrition, soil reactions, dairying, the large poultry flock and modern methods of feeding and management,

poultry breeding, botany of the farm, photosynthesis, zoology in relation to agriculture, farm management, agricultural economics, fur farming, and forestry.

Most of the schools teaching agriculture have one or more colonies of bees. In agricultural science pupils study the bee as a social insect, its life history, special adaptations, and life in the colony. In the classes in agriculture attention is given to management of the apiary, diseases, queen rearing, and the commercial aspects of the industry. Teachers report that many pupils have taken up beekeeping as a hobby or business after leaving school.

The classes in farm management and economics give attention to rural social problems, taxes, capital, mortgages, interest, roads, schools, churches, community life, selecting a farm, farm bookkeeping, farm buildings, farm labour, farm enterprises, factors affecting net returns.

The poultry program continues to be one of the most interesting of the practical activities. Pupils operate the incubator, brood the chicks, and care for the laying flock. Chicks hatched in the incubator are brooded for a short time and are then sold or given to pupils for home project work. A laying flock is kept at the school from October to April. A fattening project is conducted during the early fall.

Pupils who take agricultural science and agriculture should graduate with a good knowledge of soils and fertilizers. Studies are made of soil structures, the soil profile, physics of the soil, nature and maintenance of organic matter, chemical tests for the presence of the essential elements, tests for acidity, correction of acidity, manufacture and practical use of commercial fertilizers, study of analyses.

They study the chick embryo—their first study of developing life; they delve into the mysteries of genetics in relation to plants and animals and, through their studies of plant and animal breeding, they develop a greater appreciation of the work of the farmer in bettering the lot of man.

The School Garden

School gardens in Ontario vary in size from one-tenth of an acre to five acres. The larger areas are at schools where there are established Departments of Agriculture. The garden program in most schools features the following:

1. An area for the growing of vegetables and small fruits. As school gardening is a part of the course in agricultural science this phase of the garden work is usually handled by the pupils of the agricultural science classes.
2. Experimental plots, where experiments are conducted on varieties, commercial fertilizers, seed bed preparation, etc.
3. Crop rotations—permanent areas to study soil reactions, organic content, fertility levels of two, three, and four-year rotations.
4. Areas for propagating perennial flowers, vegetables, fruits, trees, and shrubs. This section of the garden is popular with pupils. The new plants are given to pupils for home planting.
5. Bush and tree fruits—pupils receive practice in pruning and spraying.
6. If a large garden area is available, specimens of our native trees are grown so that pupils may study the characteristics of each.

As the pupils are away during the summer, it is important that definite provision for summer care be made.

In addition to the practical activities of the garden, pupils assist in planting and caring for the flowers and shrubbery on the school grounds.

Two schools in the province have erected greenhouses which are heated from the main heating system. Pupils receive first-hand experience in greenhouse work and through such experience may be encouraged to erect a small unit at their homes. Fifty-one schools operate a hot-bed each spring. A number of them are electrically heated. Pupils of the high school at Alexandria show what can be done with manure-heated hot beds and a small homemade greenhouse heated with oil. Approximately three thousand tomato plants and hundreds of annual flowers are grown each year.

Special Accommodations and Equipment

It is desired that schools teaching agriculture have an agriculture laboratory equipped with a demonstrator's desk and pupils' desks with sinks, gas, and water. A storeroom adjacent to the laboratory is essential. A growing bench provided with a drain and water supply is essential for propagation work and for growing plants for class room work.

Five schools have erected special buildings for agricultural purposes. They provide a general purpose room for plant propagation and other activities, a poultry pen large enough to demonstrate in a practical way modern methods of managing a laying flock, an insulated room for the storage of garden vegetables, bulbs and roots, an area for work in farm mechanics and for the storage of the tractor and tools, a honey room for extracting honey and for the storage of bee supplies. The second floor, if any, is used for general school storage. A number of schools are planning to erect similar buildings in the near future.

Schools with large garden areas have purchased tractors. They range in size from the small 1½ H.P. unit to the standard farm tractor. They are on the job when it is time to plough, work, or cultivate the school garden, roll the campus, cut the grass, or remove snow from the walks and drives in the winter. They are taken into the shop and used for the teaching of tractor maintenance and elementary motor mechanics. One school reports that their large tractor has paid for itself in one year.

A motor-driven Babcock tester encourages pupils to make periodic tests of the butterfat content of the milk of individual cows in the home herd. Most of this work is done after regular school hours.

The school surveying level gives the boys practical experience in taking levels, recording readings, and making drainage profiles.

Visual Aids

Many secondary schools are now equipped with 16 mm motion picture sound projectors and slide and film-strip projectors. All have their place in the teaching of agriculture.

Fifty per cent of the schools teaching agriculture have purchased 35 mm cameras. They are being used to photograph home projects in various stages of development, practical activities about the school, and to furnish individual photographs for school year books. Teachers are building up a library of 2″ x 2″ slides made by photographing illustrative material found in periodicals and reference books. Slides showing home projects and school activities are shown at the annual Open Night and create a great deal of interest. A history of the school is being written with the school camera.

Summary

Qualified teachers of agriculture have welcomed the establishment of Departments of Agriculture in secondary schools. It has meant an immediate expansion of the program in agriculture and the opportunity to teach topics for which there was no provision in the courses in agricultural science.

Boys who are not particularly interested in the professions stay longer in school, receive a graduation diploma, and leave with a sense of pride in having met definite standards of achievement.

The importance of agriculture in the high school program becomes apparent when one considers that over 5,000 boys are receiving instruction in this subject during the current school year.

The courses are open to all pupils. No attempt is made to give the rural pupils a course different from that of urban pupils. Although agriculture is one of the optional subjects of the curriculum, we find that in most schools teaching agriculture almost all boys of Grades IX and X are enrolled in the classes. Schools attempting to teach agriculture as a vocational subject to rural boys only have found difficulty in making the course popular. They have found that urban boys do not wish to be barred from receiving instruction in scientific agriculture. Many of the high school students in county contests are urban pupils.

School attendance has increased with a marked increase in the number of rural boys and girls attending high school. Rural pupils attending the high schools of the province increased from 27,000 in 1944 to 38,000 in 1949. In many schools two-thirds of the pupils are from rural areas. School buses are providing transportation for approximately 30,000 high school students in this province. Equal educational opportunities are being provided.

Practical courses in agriculture, shop work, home economics, and commercial work have given many boys and girls a new interest in high school work, new experiences, and a new philosophy.

Agricultural Education in Alberta

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Improved Educational Opportunities for Rural Boys

The objectives of the Alberta secondary school have recently been restated as follows:

Personal Development: The primary aim of the school is to assist each Alberta youth in his growth toward maximum self-realization.

Growth in Family Living: Each Alberta youth must learn to appreciate the unique and indispensable part played in society by the home and family and especially the influence of the family unit upon right thinking in connection with morals, institutions, and the current issues of democratic living.

Growth Toward Competence in Citizenship: Each Alberta youth must be brought gradually to a realization of his position and responsibilities in the school, community, province, and nation, and finally in the community of nations.

Occupational Preparation: The school must help each Alberta youth to develop those understandings and attitudes that will make him an intelligent and productive participant in economic life, and assist him to develop technical skills, or prepare him for post-school vocational training.

The current emphasis in our secondary education has necessitated a widening of high-school programs to include exploratory and vocational subjects, the expansion of the student guidance program, and the organization of more extensive student activities.

The centralization of schools has been one of the most important developments in rural education in Alberta in the past few years. The success of the central-school plan depends to a large extent upon adequate transportation; this has been provided for

in that more than one thousand school conveyance routes are covered daily in bringing pupils to central schools. For many of the older students attending centralized schools there is no convenient van service; therefore, 25 school dormitories or residences have been provided, operating at low or moderate cost to parents and providing good accommodation and a good school-community life for those attending schools remote from their homes.

Among the advantages of the centralization plan are the enrichment of the teaching-and-learning program in the larger school through the facilities of such courses as industrial arts, home economics, commercial subjects, physical education, and practical agriculture, the continuance at school of many more pupils beyond Grade VIII, the provision of instruction in Grades XI and XII for many rural children who otherwise would not be able to continue in school in these grades, and the improved organization of instruction for the senior students in the central high school. The school centralization plan is not as yet uniformly applicable to all sections of Alberta. There are localities where, because of the distribution of population and local geography, the smaller school is the most practicable for the junior classes. Under such circumstances only the older students need attend the more distant central high school. In Alberta, since 1944, the number of one-room high schools has shown a marked decrease and the number of high schools with four or more rooms or departments a very substantial increase.

An extensive school building program has been under way in Alberta since 1945. The needs of the younger pupils for new or improved accommodation are being provided for, as well as the needs of the students of high-school age. In the new or improved schools there is an increased number of classrooms flexibly furnished as learning laboratories and equipped with audio-visual facilities, classroom libraries, bulletin boards, and files, to meet the requirements of an enriched program of studies. In many of the schools there will be found, in all probability, an auditorium-gymnasium equipped for a full program of physical education and athletic games, but readily convertible into an assembly hall for student's union meetings, dramatic productions, concerts, school functions, and a multiplicity of popular school activities. There are workshops furnished for technical instruction, special rooms for commercial education, science laboratories, and homemaking rooms.

The programs of instruction in Alberta high schools are being modified by diversification of the subject-offerings, particularly

in the schools which have staffs of several teachers. There is a continuing tendency, as well, to offer programs of instruction established by the requirements for admission to institutions of higher learning. The need has become apparent for more high schools which will provide a good variety of academic courses and also in the same institutions make more extensive provision for pre-vocational training. The effort to meet these needs has led to the organization of the composite senior school, offering courses adapted to the needs of those students who will go on to college as well as courses particularly suitable for those who wish to secure employment in business, enter upon farming as an occupation and as a way of life, prepare for trades and crafts, or become homemakers.

A complete five-sided program in a composite high school includes, in addition to the obligatory subjects of English, social studies, health and personal development, and physical education, courses grouped under the general headings of College Preparatory, Commercial, Agriculture, Industrial Arts or Technical, and Home Economics. Each student's individual program is composed of subjects selected from the whole offering, with a particular departmental grouping of subjects given more prominence than the others. The program of almost every high school in Alberta represents to some extent an application of the composite principle, in that each includes compulsory or core subjects, selected academic elective subjects, and a number of the other elective subjects in proportion to the size of the school.

Four Alberta high schools have become composite high schools, while in a large and increasing number there has been accomplished a very substantial development of the composite plan. One of the courses recommended for first-year senior high school students (Grade X) in the Red Deer Composite High School includes the first two units of vocational agriculture in the following selection of subjects: English, social studies, health and personal development, physical education, animal science 1, plant science 1, farm and home mechanics, with an alternative suggested choice from business arithmetic, physics, and music.

Practical Agriculture Courses in Alberta High Schools

The courses in practical agriculture are animal science 1 and 2 and plant science 1 and 2. Since the high school can offer only a limited range of elective courses because of limitations of staff and equipment, it is advisable that these units be undertaken only in

those schools where there is a sufficient demand for the courses to secure classes of fair size and where the quality of instruction and the plant and equipment demanded by the course can be made available.

The primary aim of vocational education in agriculture is to train present and prospective farmers for citizenship. The high-school courses in the agricultural subjects, therefore, are designed to provide experiences that will enable the students:

1. To develop desirable attitudes toward, and appreciations of, agriculture and farm life.
2. To produce and market agricultural products effectively.
3. To co-operate intelligently in economic activities.
4. To establish and maintain a satisfactory farm home.
5. To participate in worthy rural, social, and civic activities.
6. To learn how to apply the results and techniques of modern research to the practical work of the farm.
7. To develop ability to maintain desirable relationships with teachers, parents, and the community.
8. To exercise constructive leadership and to recognize and follow worthy leadership.
9. To become established in farming.

The Alberta high school courses in practical or vocational agriculture are planned for students preparing to farm and those engaged in farming—usually on the farm at home or as farm workers looking to full establishment as independent farm operators.

Before the establishment of a Department of Vocational Agriculture is undertaken, a survey is made to determine: (1) the potential number of farm boys to be enrolled in the current year and in the future; (2) the facilities which can be made available with respect to sufficient classroom and farm shop space and suitable equipment; (3) the financial support available for the instructor's salary, mileage, reference materials, and maintenance, and (4) the opportunities which the students will have for a comprehensive supervised farming program. Good laboratory and library provision is needed.

Courses in agriculture were formerly a standard part of the program in Alberta for Grades VII and VIII, and also in Grades X and XI. The study of textbook material was supplemented by practical work, to a limited extent. Since these courses were discontinued some years ago, an appreciable amount of general

agricultural study has formed part of the course in general science in Grades VII, VIII, and IX, part of the studies in community economics in these same grades, and a good part of the first unit of biology in the senior high school. The Grade IX unit-study outlines in general science include the development of the themes: plants and animals basic to Alberta's agriculture; natural and artificial improvement of economic plants and animals. In community economics the unit-study on "Our Farm" is well planned as a project in farm and home accounting.

The organization of high-school classes in practical agriculture is effective at present in Alberta upon a moderate scale, and plans to extend this instruction to more of the high schools have been undertaken to meet a well-appreciated need of rural boys. The first classes in practical agriculture were organized in the school years 1940-41 and 1941-42 in the high school at Brooks. In the fall of 1946, courses in practical agriculture were introduced in the Cardston High School; one year later classes were begun at Medicine Hat, Red Deer, and Athabasca. The numbers of the classes and of the high schools which have included in their instructional programs one or more of the units have increased to the extent indicated by the following list for the present school year, 1950-51:

Schools	*Classes*
Athabasca High School	Plant Science 1 Animal Science 2
Canadian Union College, College Heights	Animal Science 1 Plant Science 1
(Agriculture classes include student of Lacombe High School)	
Cardston High School	Animal Science 1 and 2 Plant Science 1 and 2
Glenwood High School	Animal Science 1
Magrath High School	Animal Science 1 and 2
Alexandra High School, Medicine Hat	Animal Science 1 Plant Science 1 and 2
Red Deer Composite High School	Animal Science 1 and 2 Plant Science 1 and 2
Spirit River and Rycroft High Schools (classes taught at Spirit River)	Animal Science 1 and 2 Plant Science 1 and 2
Memorial High School, Stony Plain	Animal Science 1

The total number of students in the classes in animal science and plant science in the school year 1949-50 was 160; in the present school year the total is well over 200. The members of the classes are, in large majority, boys; enrolment is open to girls, with 15 in the classes this year.

A need is felt for instruction in farm mechanics for the benefit of the boys of the above classes. In the Magrath, Red Deer, and Stony Plain high schools there are classes in farm and home mechanics, while in four of the other schools the students have the opportunity to take one or more of the following technical elective courses: woodwork 1 (eight periods per week), woodwork 1a (four periods per week), metalwork, electricity, or automotives.

The requirement with respect to the qualifications of the teachers of the classes in vocational agriculture is that, in addition to the Alberta High School or Professional Teacher's Certificate, each should hold the degree of Bachelor of Science in Agriculture. A farm background or farm experience contributes to the teacher's interest and practical course-interpretation. Adherence to this standard of qualification gives a good guarantee of the purposefulness and quality of the work of the instructors, all of whom are proving to be very resourceful in their work of instruction. The course in Education Method in the Faculty of Education of the University of Alberta includes an option in Means and Methods of Teaching Practical Agriculture. This course, in its third year, is being taught by Professor H. A. MacGregor, of the Faculty of Education, whose contribution to the vocational agriculture program is very substantial in inspiration of prospective teachers. In both philosophical and practical aspects of the teacher-training program, Mr. MacGregor is making an effort to anticipate the problem-solving needs of farm students. Eight teachers-in-training are at present enrolled in this course, there having been a similar number in each of the two previous years. The immediate need for instructors in agriculture in the high schools is thus being anticipated. For a time, progress with the agricultural program in the high schools was hampered by a lack of qualified instructors. The situation is now improving. The instructors of the present high school classes have, in their respective schools, other teaching duties, mainly in the science field. They devote from one-fifth to seven-eighths of their teaching time to the courses in animal science and plant science. Each student in agriculture is required to carry on some practical agricultural project as a part of the regular course, under the supervision of the teacher. This

supervision usually necessitates periodic visits by the teacher to the projects at the students' home farms. Since part of the supervision is necessarily in the summer school vacation, the teachers' duties have to include this in one, if not both, of the months of July and August.

The plant and equipment at each school, as well as the instruction, require the approval of the Department of Education. The Department's Subcommittee on Agricultural Education includes three Superintendents of Schools who have played an important part in the drawing up and revision of courses. One of these Superintendents has done post-graduate work in vocational agriculture and has had major responsibility in the supervision of planning for new school centres for instruction in agriculture.

The teaching time for each of the units is five hours per week through the school year, or the equivalent in the Red Deer semester plan. A student in any year may enroll in two units, one of animal science and one of plant science. An associated course in farm shop or farm mechanics would require another half-day each week, bringing the total to 50 per cent of the student's in-school time in each of two of the three high school years.

The outlines of the courses apply the principle that effective teaching for the vocation of farming involves first-hand participation in farm practice. Consequently, the project work is given a prominent place in each unit. Among the themes for reporting, outlining, and recording by the students in animal science 1 are: a survey of the livestock industries of the community, project work or a laboratory course related to these industries, major and minor practical duties, study in the fields of simple genetics, bacteriology, livestock improvement plans, feeding, government policies and services, research and evaluation. In animal science 2: laboratory dissections, animal judging, actual experiences common to the livestock industry, major and minor stock improvement programs. In plant science 1: laboratory problems related to seasonal studies, pasture and forage practices, crop sequences, soil conservation, fertilizers, equipment and machinery for plant culture. In plant science 2: study of plant ecology on an actual farm, botanical characteristics and variety identification of grains and grasses, field trips and reports, plant breeding, horticulture, weed eradication, practical work in combating insect pests. This listing illustrates the scope of the classwork.

For example, a second-year animal science project on sheep would include: selection of breed to fit prevailing conditions, selection of five or six breeding ewes—each to be the property of one student—selection of ram, breeding care, shelter, feeding and care of ewes through the winter, studying diseases and watching for symptoms, giving treatment as required, lambing, docking and castration of lambs, registration of purebred stock, early marketing, shearing, summer care, wool grading and marketing, keeping complete records, fitting and showing individual sheep, judging events. An example from second-year plant science is a pea production project, including the choice of a variety of seed to meet local conditions, the place of peas in a rotation, obtaining a contract, selection of land, soil and climatic features, seed selection, acquiring, treating (inoculation), seeding and tillage practices —preparation of seed bed, weed control, cultivation, operation and care of machines used, roguing, harvesting, sale of peas, analysis of income and expense.

At the Red Deer Composite High School 48 students are enrolled in the agriculture classes. The special quarters include the plant science classroom, the animal science classroom, implement room, cow barn in which the dairy herd of ten Holstein cattle is kept, beef-calf section of barn, feed room, milk-cooling room, and quarters for swine. Among the current projects undertaken by individual students are: the improvement of seed oats on a home farm, implementing a crop rotation plan, flax production on thirty acres, beef-club calf project, dairy calf project, poultry-flock project. Group projects include landscaping for the community centre, the preparation for showing and marketing of feeder cattle and purebred pigs. The work with the dairy cattle, which are not owned by the school, is a part of the farm-laboratory work. Sales of milk, mainly to the school residence, of feed, livestock, and poultry for 1950 gave a substantial excess of receipts over expenditures for the agricultural department of the school. The students share in the bookkeeping and recording.

While the agricultural centre at the Red Deer school has been more largely developed in quarters and equipment than have the others, the project work is quite typically carried on at the home farms, for the most part. The instructors consider that the ideal is that such work be done at home, with supervisory visits from time to time. Such a plan is effective, in the main, at the other schools. At each school the Boards of Trustees plan to develop an agricultural centre reflecting community needs. The Medicine

Hat school has undertaken greenhouse work and garden projects on suburban land. The Canadian Union College is a residential school with its own complete farm establishment within which extensive project work is done. Farm shop work has been made part of the course here, with the same instructor for all phases of the work in agriculture; the students have made labour-saving farm equipment which is in use. At Cardston the students have had much practical experience in veterinary science. At Spirit River an experimental class in agriculture is this year being taken with a Grade IX class. In general, the schools in which there are classes in vocational agriculture do not have livestock establishments but depend upon the farms of the community as a laboratory for the classes.

There is scope within these courses for training in reading and English expression, in cost accounting, and in logical reasoning, with adoption of democratic ideals through ambitious co-operation within the participating student-group. Many of the students have been encouraged successfully to continue with their education for a much longer time than they would otherwise have done. Some have gone on to the Provincial Schools of Agriculture; others, having discovered a fresh vocational interest, have secured the required matriculation standing for admission to the Faculty of Agriculture of the University of Alberta. The program in agriculture in Alberta high schools is still in an early stage of development, but the apparent results are definitely encouraging for those who are supporting it and working for its extension. The high-school program in agriculture is under review at present. A rearrangement may be made whereby units of agriculture, rather than separate courses in animal science and plant science, may be given a place in each high-school year in schools in which such a plan may profitably be followed.

The Provincial Schools of Agriculture and Home Economics

The Alberta Schools of Agriculture and Home Economics are under the direction of the Alberta Department of Agriculture. Advisory to the Minister of Agriculture there is a Board of Agricultural Education, on which the Department of Education is represented by the Deputy Minister of Education. Recently the Board has considered such matters as progress reports on the new Fairview School, agricultural education in junior and senior high schools, and the relationship of the Schools of Agriculture and composite high schools to the University of Alberta.

Three Provincial Schools of Agriculture and Home Economics, at Olds, Vermilion, and Claresholm, were established in 1913 by the Department of Agriculture of the Government of Alberta. The Olds school has since operated continuously. The Vermilion school has continued in operation, with the exception of 1933 and the war years, 1941 to 1945, during which it was a Canadian Women's Army Corps centre. The Claresholm school operated until 1931. In 1950 the establishment of a new School of Agriculture and Home Economics at Fairview, in the Peace River district, was undertaken, with Dominion Vocational Training assistance in meeting the capital costs. The three schools, at Olds, Vermilion, and Fairview, will be in operation in the fall of the present year.

The courses in these residential schools are offered for the benefit of young men and women of Alberta's rural communities whose intention it is to pursue farming and farm homemaking as their life's vocation. Since their inception almost nine thousand students have been enrolled. The regular courses cover a period of two terms, each of about six months, the term opening in October and closing before the middle of April. In April, 1950, 192 diplomas were awarded to the year's graduates at Olds and Vermilion. The enrolment of students in the 1950-51 term was:

	At Olds	*At Vermilion*	*Total*
Agriculture:			
First Year	50	61	111
Second Year	42	40	82
Two-in-one (Special one-term course)	33	24	57
Totals	125	125	250
Home Economics:			
First Year	28	27	55
Second Year	17	19	36
Two-in-one (Special one-term course)	12	14	26
Totals	57	60	117
Totals, Agriculture and Home Economics	182	185	367

The minimum age for admission is sixteen years. Since, for the present term, the number of applications for admission exceeded the schools' capacity, the minimum age for boys was raised to seventeen. The average age of the students is at present eighteen and one-half years. Applicants must possess sufficient elementary education and knowledge of the English language to enable them to profit from their attendance. In general, upon entrance, the students have Grade VIII or higher standing, with their average attainment that of completion of the first year in high school. Students who have acquired at least 70 credits in the Alberta high school course (Grade XI standing), whose scholastic ability and practical home and farm experience is of a sufficiently high standard, may be allowed to take the full two-year course in one school year.

Each Provincial School has large, modern buildings. The school dormitories at Olds and Vermilion accommodate approximately two hundred students each. Other buildings provide classroom and laboratory space for the instructional work. A well-equipped farm is operated in connection with each school. The livestock, which includes some of the more popular breeds of horses, cattle, sheep, and swine, is available for classwork. Limited acreages are devoted to the demonstration of varieties of cereals, forage crops, and tree and bush fruits best suited to local climatic conditions.

The members of the teaching staffs of the Schools are excellently prepared for their instruction in particular subject-fields, mainly through University specialization leading to degrees in Science, Agriculture, and Arts. Their summer duties are chiefly in field and extension service with the Department of Agriculture.

The program of studies goes beyond technical training to include cultural, social, and recreational activities that are designed to develop self-expression and worthy home and community membership. The object of the course in agriculture is to provide training to meet practical farm problems successfully, with emphasis placed on the basic activities of western agriculture. Special attention is given to the work in animal husbandry, field husbandry, and farm mechanics, including actual practice in carpentry, metal work, and the repair of farm machinery. The instruction in agricultural physics, chemistry, bacteriology, farm management, bookkeeping and mathematics is planned to carry over to practical applications in farm operation. The course in English, besides supplying a grounding in fundamentals of language, written and

oral, includes a course in public speaking. All students are encouraged to become accustomed to expressing themselves in public.

The first-year course in animal husbandry includes a detailed study of the feeding, care, and management of each type of farm livestock, with attention to fur-bearing animals and the treatment and control of common sporadic diseases. There are first-year classes in entomology and beekeeping. The second-year course includes: animal nutrition and sanitation, principles of breeding, breed histories, livestock records and registration, review of market conditions and laboratory work-observation of good practices related to the production of commercial and purebred livestock, exercises in stock judging and practice in techniques incidental to livestock production including farm butchering and meat cutting. In both years in animal husbandry, lecture and laboratory periods are devoted to dairying and poultry.

Lecture and laboratory periods in field husbandry are devoted to field crops, horticulture, and botany. The aim of the course in farm mechanics is to familiarize students with the use, maintenance, and operation of mechanical power and equipment on the farm and with the tools used for both wood and metal work. This course comprises units on farm machinery and motors, metal work, farm building, mechanical drawing, and building construction.

There is a first-year course in community organization and a second-year course in economics and co-operation. Farm management courses are given in both years. The second-year course in farm management is devoted to the study of farm labour, farm bookkeeping, income taxation, planning farm production programs, analyses of agricultural conditions and production requirements, and a review of municipal, provincial, and Dominion services available to the farmer.

The course in home economics is planned so that, even if a student attends one term only, the work covered will be of particular value in the home. The second-year course continues the studies begun in the first, with special emphasis on nutrition, home furnishing, and clothing. While, in home economics, emphasis is naturally placed on cooking, sewing, home management, home nursing, and laundering, some attention is given also to horticulture, poultry, and dairying. The girls have classes in English, community organization, mathematics, science, and household mechanics. The course does not prepare young women as teachers of home economics, but it does give them an excellent grounding in the major subjects.

Those who obtain their diplomas, and who have the required academic standing, may enter the first year of the course leading to the degree of Bachelor of Home Economics at the University of Alberta.

The cost to students of board and room, school fees, textbooks, and materials for laboratory and workshop use is approximately $262 for the session. A tuition fee of $50 is required from students who are not residents of Alberta.

The students who complete the courses successfully qualify for diplomas in practical agriculture or in home economics. The requirement for the Alberta High School Diploma is 100 credits for successful completion of courses over a period of three years in Grades X, XI, and XII. Provision is made for an interchange of credits between the Schools of Agriculture and Home Economics on the one hand and the high schools on the other. First-year courses successfully completed in the former entitle the student to 21 high school credits (animal science, plant science, farm and home mechanics, or homemaking, fabrics and dressmaking, health and physical education). Second-year courses will give the student 23 high school credits, and the "two-in-one" course will give the student 23 high school credits at the Grade XI level. Graduates of the Schools of Agriculture and Home Economics may proceed to the University of Alberta for the degree of Bachelor of Science in Agriculture or Bachelor of Home Economics if they have satisfactory standing in a program which includes Grade XI English, social studies, algebra, and geometry.

The technical training provided in the Provincial Schools of Agriculture and Home Economics has been of inestimable value to hundreds of the younger farmers in meeting their problems. The graduates of these schools have served well in later life. The subject-program, the extra-curricular activities, the developed special interests, and the social contacts enrich the life of the students and broaden their mental horizons. A significant percentage of the graduates continue their studies at the University.

The educational program of the Alberta Department of Agriculture includes a very extensive and valuable development of junior activities and youth-training. The Club work reaches out to boys and girls who otherwise would have little contact with organized groups whose interests are similar to their own. Through these activities many have become interested in going forward with

their education, particularly in agriculture. A good result of the junior activities is that many students are attracted to the courses in the Provincial Schools of Agriculture and Home Economics. Over five thousand young people are actively engaged in livestock, field crop, garden, and homemaking clubs. Junior Club Weeks are held at the Provincial Schools of Agriculture and Home Economics. The junior program provides for Leaders' Courses, Boys' and Girls' Camps, Club Rallies, Judging Competitions, and supervised home project work by young people between the ages of twelve and twenty.

Mental Health Course for Teachers

The fourth annual mental health course for school teachers will be conducted at Forest Hill Village, Toronto, from September, 1951, to June, 1952. Selected teachers will receive training in mental hygiene and methods and conduct research in mental, social, and emotional health in a project which was initiated by the Canadian Mental Health Association and is directed by a committee of interested departments of the University of Toronto.

Although enrolment is limited, applications may still be made. Interested teachers should apply through their school boards to Dr. J. M. Griffin, Medical Director, Canadian Mental Health Association, 111 St. George Street, Toronto. Teachers between 30 and 40 years of age with at least five years' successful teaching, preferably university graduates with basic courses in psychology and social sciences, are eligible.

Previously, some teachers have been granted leave of absence on full salary, and others have received financial assistance or bursaries. The Dominion Government provides bursaries and subsistence allowances for teachers nominated by the provinces up to a maximum of $250 per month for married graduates, with smaller amounts for undergraduates and single persons, together with book and travel allowances.

Books Received

ARBUTHNOT, May Hill. *Children and Books.* New York, Scott, Foresman, 1947. In Canada from W. J. Gage, Toronto. pp. xiv, 626. $3.60.

This discussion of the types of books which children like is designed primarily as a text for children's literature courses in teachers' colleges and library training schools. The "Guides To Study," which supplement each chapter, are designed for a full year's course. It is also a reference guide to parents in the selection of children's books. All types of reading which the child (age 2 to 14 or 15 years) enjoys, with the exception of textbooks, are considered. Comments and conclusions are based upon observation of children selecting or rejecting books; selections from fine children's books illustrate the criteria and general discussions. Numerous samples of illustrations, with commentary on the artist's style and technique, are also included.

COLE, Lawrence E. and BRUCE, William F. *Educational Psychology.* Yonkers-on-Hudson, New York, World Book Co., 1950. In Canada from W. J. Gage, Toronto. pp. xv, 768. $4.50. (New-World Education Series).

Because the growth and development of the *whole* individual is the school's concern, teachers must be trained for this new, wider conception of their responsibilities. The authors have organized their material around "The Mature Person," seeking to evaluate procedures and policies in the light of their contribution to the development of such a person. This person is viewed not only as an individual but also as a member of social units; hence, sociological as well as biological or physiological factors are considered.

HOOK, Sydney, ed. *John Dewey: Philosopher of Science and Freedom. A Symposium.* New York, Dial Press, 1950. In Canada from Longmans Green & Co., Toronto. pp. vi, 383. $4.25.

This collection of essays seeks "to give some evidence of the extent to which the intellectual climate of our time has been influenced by Dewey's ideas. The essays are representative of a wide variety of occupations, and hence indicate the broad basis of Dewey's influence. Two main themes are predominant throughout: "the nature of scientific inquiry and its implications for man's conception of himself, and the cosmos"; and "the aspiration for a world of free men and free societies which despite the triumphs of totalitarian regimes in the world is stronger in popular consciousness than ever before in human history."

LAZERTE, M. E. *Teacher Education in Canada.* Toronto, W. J. Gage, 1951. pp. 80. $1.25. (Lectures delivered under the Quance Lectures in Canadian Education, April 10-11, 1950).

As Dean of the Faculty of Education of the University of Alberta (1935-1950) and as chairman of CEA committees which conducted a comprehensive survey of the status of teaching in Canada, Dr. LaZerte has a comprehensive knowledge of teacher-training in Canada. His first lecture presents an

historical survey of "educational practices," showing the origins of teacher education in Canada and the comparative uniformity of practice in all provinces. With the assumption of control by the provincial departments of education, differences between provinces appear in training and certification. Today a general pattern is still discernible, but selection of personnel, entrance and certification requirements, training programs, practice teaching, and in-service training reveal wide variation as well as similarities. In the second lecture, Dr. LaZerte discusses the differences in some detail, pointing out that "variability" is the outstanding feature of teacher education, training, and certification in Canada. He suggests reasons for this variation, outlining the program in Alberta by way of example. In conclusion, Dr. LaZerte points out the trends and problems for the future which have resulted from the development of this characteristic: wastage of trained personnel, high school education as a preparation for teacher-training, changes in teacher-training programs, salary schedules, etc.—all must lead to the establishment of teaching as a *profession*.

RUGG, Harold and BROOKS, B. Marian. *The Teacher in School and Society*. Yonkers-on-Hudson, New York, World Book Co., 1950. In Canada from W. J. Gage, Toronto. pp. xi, 530. $3.60.

"What is to be my role, and my work, as a teacher?" is the theme of this first course in education for the student preparing to teach. The authors submit *guidance* as the crux of the teacher's work, and *American culture* as the chief factor which shapes it. This personal leadership of the teacher is analysed; first, its moulding of culture, and second, its specific application in the school to the learning, growth, and development of pupils. Each chapter contains an exposition of key ideas, problems, and relationships, suggestions of projects to illustrate the text, and a selective list of additional reading.

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